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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,072	10/28/2003	Antti Lilja	KOLS.065PA	7153

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EXAMINER
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TRINH, SONNY

ART UNIT	PAPER NUMBER
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2618

DATE MAILED: 03/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/695,072

Applicant(s)

LILJA ET AL.

Examiner

Sonny TRINH

Art Unit

2687

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 25-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-17 and 19-24 is/are rejected.
- 7) ☒ Claim(s) 8 and 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Election/Restrictions***

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-24, drawn to Subject matter having detail of a technique for regulating the intensity of signals transmitted between stations, classified in class 455, subclass 522.
- II. Claims 25-27, drawn to secondary terminal unit configured to communicate with radio terminal equipment, classified in class 455, subclass 569.1.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention II has separate utility such as in the peripheral device environment (e.g. "a wireless headset") that can be used independently from the radio terminal equipment in the invention of group I. See MPEP § 806.05(d).

During a telephone conversation with Mr. Steven R. Funk (Reg. No. 37,830) on 02/28/06 a provisional election was made with traverse to prosecute the invention of **Group I, claims 1-24**. Affirmation of this election must be made by applicant in replying to this Office action. Claims **25-27 withdrawn** from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Information Disclosure Statement***

1. The information disclosure statement filed on 02/09/04 has been considered and placed in the application file.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-6, 10, 11-16, 20-23** are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitzlaff (U.S. Patent Number 4,636,741) in view of Rautiola et al. (hereinafter "Rautiola"; U.S. Patent Number 6,853,851 B1).

Regarding **claim 1**, with reference to figures 11, 13 and descriptions in column 9 line 46 to column 10 line 68, Mitzlaff discloses a method of power control in a radio terminal equipment arrangement (abstract), the radio terminal equipment arrangement using a predetermined transmitter power class (figures 11, 13), the method further comprising: detecting a change in a usage environment of the radio terminal equipment (such as when the mobile terminal is connected to the vehicle (figure 11, box 804); and changing the transmitter power class of the radio terminal equipment based on the usage environment of the radio terminal equipment (abstract, figures 11 and 13).

However, Mitzlaff does not disclose that the radio terminal equipment communicate with one or more secondary units of the radio terminal equipment arrangement by using a low power radio frequency (LPRF) connection.

In an analogous art, Rautiola teaches a mobile terminal having a built in Bluetooth interface for connecting with peripheral devices (figure 12) using low power radio frequency (LPRF) connection (columns 12-17, specifically line 61 of column 12 to line 13 of column 13).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to incorporate the low power radio frequency, as taught by Rautiola, to the system of Mitzlaff in order to allow user to use the peripheral devices such as the headset as taught by Rautiola in figures 13 and 14 for hand-free communication without having to worry too much about radiation.

Regarding **claims 2-3**, Mitzlaff further teaches the changing of the transmitter power class of the one or more secondary units of the radio terminal equipment arrangement based on the usage environment of the radio terminal equipment such as when the mobile station is connected to a charging device (please see figures 11, 13 and descriptions for the different power class) and figure 1 and description for the connection to the battery charger 184).

Regarding **claim 4**, Mitzlaff further teaches the changing the transmitter power class to a transmitter power class using a higher power level when the establishment of the connection between the radio terminal equipment and the charging device is detected (figures 11, 13, column 1 lines 43-60, column 3 lines 28-42).

Regarding **claim 5**, since Mitzlaff already teach the use of the different classes of power depending on the detected environmental changes such as when the mobile device is connected to the charger as discussed above, it is inherent that the system detects the disconnection and revert the power the power output back to the other class of operation. This is evidenced by following the flow-chart in figure 11, at the beginning (box 802), if the system is connected to the vehicle (box 804) the system switch from class 3 to class 1 (box 812), the system is the return (box 822) for continuously verifying whether the system is connected to the vehicle (box 804), if the answer is no at this time them the system switch the power class back to 3 (box 806).

Regarding **claim 6**, Mitzlaff further teaches the changing the transmitter power class to a transmitter power class using a lower power level when the ending of the connection between the radio terminal equipment and the charging device is detected (see flow-chart in figure 11).

Regarding **claim 10**, Rautiola further teaches that the LPRF connection is a Bluetooth connection (column 13 lines 8-13).

Regarding **claims 11-16, and 20**, these claims merely reflect the apparatus as opposed to the method claim of claims 1-6, 10 (respectively) and are therefore rejected for the same reasons.

Regarding **claims 21-23**, these claims merely reflect the equipment for performing the method steps of claims 1, 3, 5 (respectively) and are therefore rejected for the same reasons.

3. **Claims 7, 17, 24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitzlaff in view of Rautiola and in further view of Mantyjarvi et al. (hereinafter "Mantyjarvi"; Patent Application Publication US 2001/0044318 A1).

Regarding **claim 7**, the combination of Mitzlaff and Rautiola discloses the invention but does not disclose the detecting of a change in the usage environment based on detecting, by a sensor device, a predetermined distance between the radio terminal equipment and a human body.

In an analogous art, Mantyjarvi discloses the method for controlling of a communication system wherein the terminal comprises detector means that are arranged to detect if there is a contact between at least one surface of the terminal and the skin of the user of the terminal (abstract). Mantyjarvi further teaches the detecting of a change in the usage environment based on detecting, by a sensor device, a predetermined distance between the radio terminal equipment and a human body (please see paragraphs [0014], [0031], [0037]).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to incorporate the proximity detector, as taught by Mantyjarvi, to the system of Mitzlaff and Rautiola in order to provide an easier and convenient way to control the equipment depending on whether the device is connected to the user or not.

Regarding **claims 17 and 24**, these claims merely reflect the apparatus and equipment as opposed to the method claim of claim 7 and are therefore rejected for the same reasons.

4. **Claims 9, 19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitzlaff in view of Rautiola and in further view of 3GPP, Bluetooth Specification, Version 1.1, February 22, pg. 21-22 (submitted by Applicant, hereinafter "Bluetooth Specification").

Regarding **claim 9**, the combination of Mitzlaff and Rautiola discloses the invention but does not disclose the Bluetooth power classes. However, the Bluetooth Specification discloses the different classes of transmit powers (page 21). Therefore, it would have been obvious and well within the level of a person of ordinary skill in the art to incorporate the Bluetooth power classes to the system of Mitzlaff and Rautiola in order to save power and also minimize radiation that may be affecting the user.

Regarding **claim 19**, this claim merely reflects the apparatus as opposed to the method claim of claim 9 and is therefore rejected for the same reasons.

#### ***Allowable Subject Matter***

5. **Claims 8 and 18** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding **claims 8, 18** the applied references fail to disclose or render obvious the claimed limitations, specifically wherein the method further comprising the step of sending a control command, by the radio terminal equipment, to one or more secondary



units of the radio terminal equipment arrangement for changing the transmitter power or the transmitter power class of the secondary unit.

### CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sonny TRINH whose telephone number is 571-272-7927. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward URBAN can be reached on 571-272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

2/28/06

  
SONNY TRINH  
PRIMARY EXAMINER